

Remarks

This Amendment is in response to the Office Action mailed April 11, 2001. Claims 1-19 are pending in this application. Claims 1-19 have been rejected. Claims 4, 5 and 19 have herein been amended. Claims 1-3 and 6-18 have not been amended, but are set forth for the convenience of the examiner.

Claims 4, 5 and 19 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite due to a lack of antecedent basis. Applicant has herein amended Claims 4, 5 and 19 according to the Examiner's suggestions to remove the lack of antecedent basis from these claims. Accordingly, by this amendment, the rejection under 35 USC 112 has been overcome.

Claims 1-3 and 17-19 have been rejected under 35 U.S.C. §102(b) as being anticipated by Collins et al. For the following reasons, the Examiner's rejection is respectfully traversed.

Applicant's invention comprises a customer interface module 70 (the device where the customer's lines are connected) which is selectively detachable and positionable in one of a plurality (two illustrated) of customer interface module connectors 60, 61, which as illustrated are positioned on respective sides of a shelf assembly 40, which receives a plurality of network interface units in network interface unit connectors 54. The module 70 includes a plurality of connectors 72 (phone jacks) which each correspond and is wired to a

specific network interface unit connector 54. Thus, for example, the customer's lines are plugged into the phone jacks 72 on the customer interface module 70, and are thus in turn connected with the service provider's network interface units connected to the respective network interface unit connectors 54. The entire customer interface module 70 is selectively detachable and positionable in either customer interface module connector 60 or 61.

Collins et al. does not meet every claim limitation of Applicant's original Claims 1-3 and 17-19. For example, Claims 1, 17 and 19 claim that the shelf assembly 40 has at least two customer interface module connectors 60, 61, and that the customer interface module 70 selectively connects to either of the customer interface module connectors 60 or 61. Note that the customer interface module 70 is the device where all of the customer's lines attach. Collins et al. on the otherhand, does not disclose any such corresponding elements. In Collins et al., the customer interface module (i.e., the device where the customer's lines connect (module 70 in Applicant's invention)) is the telephone terminals 20 or to the additional connector 22 which in turn connects to the terminals 20 (see Figure 3 and column 5, lines 16-23). In Collins et al., each terminal 20 is connected to one of a plurality of subscriber line interface modules 70. These subscriber line interface modules 70

generally correspond to Applicant's network interface units placed in network interface unit connectors 54 of shelf assembly 40.

However, Collins et al.'s customer interface device 22 or 20 is not modular and cannot be selectively detached and positioned. Further, Collins et al. does not disclose the use of a plurality of customer interface module connectors, i.e., there is not two separate and distinct connectors (and locations) provided to attach the customer interface device 22 or 20. Collins et al. simply provides a fixed customer interface device 22 or 20 which is attached directly to the enclosure 12, as opposed to Applicant's invention wherein the customer interface module 70 is detachably connected to the shelf assembly via one of a plurality of connectors 60, 61.

Accordingly, Collins et al. does not meet the limitations of Applicant's claimed invention, and specifically the limitations that there are at least two customer interface module connectors 60, 61 on the shelf assembly, as well as a customer interface module 70 selectively connected to either one of the connectors 60, 61. Therefore, Applicant respectfully requests reconsideration and removal of the Examiner's rejection.

With respect to Claim 3, it is noted that the cover 43 in Collins et al. does not have an opening (see Figure 1). Instead, there is an opening 50 in the bottom wall 38 of the chamber 14. Further, this opening 50 is for a cable, not for a customer interface

module as in Applicant's invention. With respect to Claim 18, Collins et al.'s cover is hinged at one side. It is not placed over the entire shelf assembly and removably outward of the same as in Applicant's invention.

Claims 4 and 6 have been rejected under 35 U.S.C. §102(b) as being anticipated by Bremenour et al. For the following reasons, the Examiner's rejection is respectfully traversed.

Bremenour et al. does not meet every claim limitation of Applicant's original Claims 4 and 6. Claim 4 and 6 claim that the shelf assembly 40 has at least two customer interface module connectors 60, 61, and that the customer interface module 70 selectively connects to either of the customer interface module connectors 60 or 61. Bremenour et al. on the otherhand, does not disclose any such corresponding elements. Further, Bremenour et al. discloses a rack for a control system for machinery and is unrelated and non-analogous to Applicant's telecommunications network interface shelf assembly.

Notwithstanding the non-analogous art, and as best understood in the Examiner's rejection, in Bremenour et al., the I/O modules 25 would roughly correspond to Applicant's network interface units attached in the network interface unit connectors 54. The adapter module 26 in Bremenour et al. would roughly correspond to Applicant's customer interface module 70. The connectors 28 and 29 on adaptor

module 26 in Bremenour et al. would roughly correspond to Applicant's amphenol type connectors 74.

However, Bremenour et al.'s adaptor module 26 cannot be selectively detached and positioned. Further, Bremenour et al. does not disclose the use of a plurality of connectors for the adaptor module 26 to connect to the circuit board, i.e., there is not two separate and distinct connectors (and locations) provided to attach the adaptor module 26 to the circuit board. Bremenour et al. simply provides one fixed location for the adaptor module 26 "along the right hand side plate 2" (see column 3, lines 58-59), as opposed to Applicant's invention wherein the customer interface module 70 is detachably connected to the shelf assembly via one of a plurality of connectors 60, 61. Note that the relevant connectors are the connectors connecting the module to the shelf assembly, not connections for the customer lines to the module.

Accordingly, Bremenour et al. does not meet the limitations of Applicant's claimed invention, and specifically the limitations that there are at least two customer interface module connectors 60, 61 on the shelf assembly, as well as a customer interface module 70 selectively connected to either one of the connectors 60, 61. Therefore, Applicant respectfully requests reconsideration and removal of the Examiner's rejection.

With respect to the remaining rejections of Claims 5 and 7-16 under 35 U.S.C. §103 as being unpatentable over the combination of Bremenour et al. in view of Collins et al., and further in view of other prior art, Applicant respectfully states that the above identified deficiencies of Bremenour et al. and Collins et al. remain in the Examiner's proposed combinations, and for the reasons stated above, the Examiner's proposed combinations do not make obvious Applicant's claimed invention. Nonetheless, Applicant reserves the right to further distinguish the Examiner's proposed combinations from Applicant's claimed invention at a later time should it become necessary.

Accordingly, Applicant respectfully asserts that the claims, as amended herein to overcome the 112(2) rejection, are now in condition for immediate allowance. An early Notice of Allowance is respectfully requested.

Version with markings to show changes made

Please amend the application as follows:

In the Claims:

Please amend the claims as follows:

4. (Amended) An improved shelf assembly for telecommunications network interface units, said shelf assembly including a printed circuit board for interconnecting customer lines with network service provider lines through said network interface units, said customer lines being connected to a customer interface module which is operatively connected to said printed circuit board, said network service provider lines being connected to said printed circuit board via connectors provided on said printed circuit board, said improvement comprising:

at least two customer interface module connectors provided on said printed circuit board, said customer interface module being selectively connected to either of said at least two customer interface module connectors [modules] to afford flexibility in mounting said shelf assembly.

5. (Amended) The improved shelf assembly of Claim 4, further comprising a cover for said shelf assembly, said cover having at least two customer interface module receiving openings to allow said cover to be positioned over said shelf assembly when said customer

interface module [unit] is connected to either of said at least two customer interface module connectors.

19. (Amended) A method of mounting a wall telecommunications rack assembly in a difficult to access location, said method comprising the steps of:

providing a shelf assembly having at least a first customer interface module connector and a second customer interface module connector;

providing a customer interface module selectively and removably attachable to said shelf assembly; and

selectively attaching said customer interface module [unit] to one of said first customer interface module connector and said second customer interface module connector.

Conclusion

As described above, neither Bremenour et al., Collins et al., nor the prior art of record, either alone or in combination, fairly teach, suggest or disclose the novel and unobvious features of Applicant's invention as presently claimed. Accordingly, Applicant respectfully asserts that the claims as presented herein are now in condition for allowance. An early notice allowance is respectfully requested.

Any arguments of the Examiner not specifically addressed should not be deemed admitted, conceded, waived, or acquiesced by Applicant.

Any additional or outstanding matters the Examiner may have are respectfully requested to be disposed of by telephoning the undersigned.

A petition for a three month extension of time is enclosed herewith.

A postcard is enclosed evidencing receipt of the same.

Respectfully submitted,

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